

Work Order ID 131984

131984

Page 1

Item ID: D044-662-013

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: R44 Bearpaws - Large

Stop ***NS2***

Start Date: 4/12/15 Start Qty: 2.00

2

Cust Item ID:

Required Date: 4/20/15 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: ML5 Date: 15-04-22 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
N/A	Rev N/A								
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPPD044-662-013		CHG 001						
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

DAS
27
9-89

per ECN 15-549
002 INF 15-5-6 2

ML5 15-05-06
DAS
6
9-89
MAY 22 2015

2X DAS
27
9-89
MAY 05 2015

2 DAS
6
9-89
MAY 22 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Work Order ID 131984***131984***

Page 2

Item ID: D044-662-013

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: R44 Bearpaws - Large

Stop ***NS2***

Start Date: 4/12/15 Start Qty: 2.00

2

Cust Item ID:

Required Date: 4/20/15 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D044-662-013								
	Location: <u>014</u>								
	PPP Rev: _____								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

2

DAS
6
9-89

MAY 2 2 2015

MJS

MAY 2 5 2015

MJS

MAY 2 5 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Tuesday, April 21, 2015 1:59:09 PM

Page 1

Work Order ID: 131984

131984

Parent Item: D044-662-013

D044-662-013

Parent Item Name: R44 Bearpaws - Large

Start Date: 4/12/15

Required Date: 4/20/15

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A New Issue 07-01-30 JLM
IPP Rev:B As per IIN 044-662 REV D 07-03-28 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3601-1 *D3601-1* Radius Block		Manufactured	No			110	Each	95.0000	8	16	27 9-89		

Location Loc Qty Loc Code

ST051 77
131259 77
ST051A 18
124090 18

DAS
28
9-89

DAS
6
9-89

D2182B

Manufactured No

110 f

609.5680

4

D2182B

Rubber Cushion - Black (\$Per Foot)

Location Loc Qty Loc Code

ST411 259.568
115189 21.5
128976 238.068
st640 350
130427 350

DAS
27
9-89

DAS
28
9-89

DAS
6
9-89

4x 4.5 per kit

D2529

Manufactured No

110 Each

266.0000

16

D2529

Washer

DAS
6
9-89

Location Loc Qty Loc Code

ST008 266
128950 266

DAS
27
9-89

DAS
28
9-89

D3556-1

Manufactured No

110 Each

0.0000

8

D3556-1

Clamp For R44 Bearpaw

B131429
Rev C.

DAS
27
9-89

DAS
28
9-89

DAS
6
9-89

MAY 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Tuesday, April 21, 2015 1:59:09 PM

Page 2

Work Order ID: 131984

131984

Parent Item: D044-662-013

D044-662-013

Parent Item Name: R44 Bearpaws - Large

Start Date: 4/12/15

Required Date: 4/20/15

Start Qty: 2.00

Required Qty: 2.00

D3529-1

Manufactured No

110

Each

0.0000

2 4

DAS

DAS

D3529-1

Bearpaw

6

AN4-15A

9-89

Purchased No

110

Each

214.0000

8

DAS

DAS

AN4-15A

Bolt

DAS

6

9-89

Location

Loc Qty

Loc Code

GA

38

120449

38

ST325A

176

m130358

8

m131320

68

m131957

100

NAS1149D0463J

Purchased No

110

Each

5,164.000

8

16

DAS

DAS

NAS1149D0463J

WASHER

DAS

6

9-89

Location

Loc Qty

Loc Code

GA

41

M129390

41

ST269

5123

M129682

86

M130799

403

M132035

4634

MAY 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

Picklist Print

Tuesday, April 21, 2015 1:59:09 PM

Work Order ID: 131984

131984

Parent Item: D044-662-013

D044-662-013

Parent Item Name: R44 Bearpaws - Large

Start Date: 4/12/15

Required Date: 4/20/15

Start Qty: 2.00

Required Qty: 2.00

AN4-14A

Purchased

No

110

Each

218.0000

8

AN4-14A

Bolt

DAS

27

9-89

DAS

28

9-89

MAY 0 5 2015

DAS

6

9-89

Location

Loc Qty

Loc Code

FG

5

122141

5

ST325A

7

131677

2

M131153

5

ST344

206

M130716

15

M131803

191

8

16

MS21042L4

Purchased

No

110

Each

1,277.000

8

MS21042L4

Locknut

DAS

27

9-89

DAS

28

9-89

MAY 0 5 2015

DAS

6

9-89

Location

Loc Qty

Loc Code

FP001

42

m124231

42

GA

574

m127813

574

ST260a

118

m130799

56

m131803

62

ST305

543

426

426

m128300

8

m130922

97

m131618

12

m B2123

16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval
Description Work Order Deviation		Disposition			Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER : ☐			

4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D044-662-011 Bearpaw Installation	4.6 lb 2.10 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	128.1 in 3.25 m	589 in-lb 6.8 m-kg
D044-662-013 Bearpaw Installation	6.2 lb 2.81 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	129.1 in 3.28 m	800 in-lb 9.2 m-kg
D044-662-041 Wearplate Kit (installed on D044-662-011/-013 Bearpaw Kit)*	1.6 lb 0.73 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	128.3 in 3.26 m	205 in-lb 2.4 m-kg

*D044-662-041 weight and balance should be added to D044-662-011/-013 kits

5.0 PARTS LIST

Qty -011	Qty -013	Qty -041	Part Number	Description
X			D044-662-011	BEARPAW INSTALLATION
	X		D044-662-013	BEARPAW INSTALLATION
		X	D044-662-041	WEARPLATE KIT
		4	D2274	Radius Block
8	8	4	D2529	Washer
2			D3075-1	Bearpaw
	2		D3529-1	Bearpaw
4	4		D3556-1	Clamp
		4	D3565-1	Wearplate
8	8		D3601-1	Radius Block
4	4		D4953-1	Cushion (Replaces D2182B045 Cushion)
		4	AN4-12A	Bolt
4	4		AN4-14A	Bolt
4	4		AN4-15A	Bolt
		4	AN4-16A	Bolt
8	8		NAS1149D0463J	Washer (Replaces AN960JD416 Washer)
8	8	4	MS21042L4	Nut (or MS21042-4)

REFERENCE ONLY

4.0 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D044-662-011 Bearpaw Installation	4.6 lb 2.10 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	128.1 in 3.25 m	589 in-lb 6.8 m-kg
D044-662-013 Bearpaw Installation	6.2 lb 2.81 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	129.1 in 3.28 m	800 in-lb 9.2 m-kg
D044-662-041 Wearplate Kit (installed on D044-662-011/-013 Bearpaw Kit)*	1.6 lb 0.73 kg	0.0 in 0.0 m	0.0 in-lb 0.0 m-kg	128.3 in 3.26 m	205 in-lb 2.4 m-kg

*D044-662-041 weight and balance should be added to D044-662-011/-013 kits

5.0 PARTS LIST

Qty -011	Qty -013	Qty -041	Part Number	Description
X			D044-662-011	BEARPAW INSTALLATION
	X		D044-662-013	BEARPAW INSTALLATION
		X	D044-662-041	WEARPLATE KIT
		4	D2274	Radius Block
8	8	4	D2529	Washer
2			D3075-1	Bearpaw
	2		D3529-1	Bearpaw
4	4		D3556-1	Clamp
		4	D3565-1	Wearplate
8	8		D3601-1	Radius Block
4	4		D4953-1	Cushion (Replaces D2182B045 Cushion)
		4	AN4-12A	Bolt
4	4		AN4-14A	Bolt
4	4		AN4-15A	Bolt
		4	AN4-16A	Bolt
8	8		NAS1149D0463J	Washer (Replaces AN960JD416 Washer)
8	8	4	MS21042L4	Nut (or MS21042-4)

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Revision: E

Date: 15.03.20